



MARITIME  
TECHNOLOGIES  
FORUM

5th ANNIVERSARY

LEADING THE MARITIME WORLD FORWARD

# ACCELERATING SAFE MARITIME DECARBONIZATION

## ANNUAL REPORT 2025



## Foreword

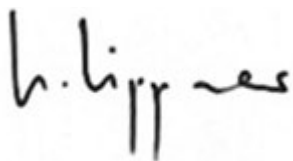
Celebrating its 5th anniversary, the **Maritime Technologies Forum** (MTF) is a collaborative platform bringing together flag States and classification societies to foster dialogue between rapidly advancing technology and the regulations that govern it. Our purpose is to support the maritime industry's safe and sustainable transition by sharing knowledge and aligning innovation with effective, forward-looking regulation.

Since 2021, MTF has served as a trusted source of unbiased information, helping the industry navigate its greatest challenges. Over the past five years, we have combined technical expertise with regulatory insight to guide the adoption of alternative fuels and support global efforts to reduce greenhouse gas emissions. At the same time, we are preparing for another frontier—automation—and the opportunities and responsibilities it brings.

Our work is practical and collaborative. Through publications, IMO submissions, and events, we have provided clarity on operational safety management, addressed the risks and benefits of emerging decarbonization technologies, and explored how classification societies and flag States can work together with rigor and agility.

As technology accelerates, uncertainty grows, but so does the need for informed leadership. MTF offers a forum where policymakers, shipowners, technology developers, and regulators can come together to share expertise and develop initial guidance whilst international regulations are being considered. We do not establish regulations or standards; rather, we deliver unbiased information and facilitate project-based collaboration with external stakeholders where appropriate.

Looking ahead, our goal remains clear: to help shape a maritime sector that is not only compliant but competitive, not only sustainable but resilient. We welcome contributions from industry stakeholders: please reach out if your organisation would like to learn more. Through shared expertise and cooperation, MTF will continue to support a future where safety and sustainability are the foundation of progress.



Lars Lippuner  
MTF Executive Committee Chair



## Introduction

The Maritime Technologies Forum (MTF) is a group of flag States and classification societies, established in 2021, which aims to bridge the gap between technological progress and regulatory process by providing technical and regulatory expertise to benefit the maritime industry. The role of the Forum is to work together on research that it publishes to the maritime industry and draw on regulatory expertise to be able to offer unbiased advice to the shipping sector. It seeks to give guidance on the use of alternative fuels and increased levels of automation in the industry to allow for the safe testing and adoption of new technologies and, thus, it helps shape world-leading regulation.

At the time of publication of this report, MTF can look back to five years of work helping the maritime industry to accelerate a safe decarbonization. To be effective also in the future, MTF will maintain and enhance the project-based collaboration with external industry stakeholders in 2026 and beyond. This report provides information on the 2025 activities of MTF, in terms of reports, IMO submissions, seminars and webinars as well as media coverage. A brief outlook for 2026 and a list of references concludes this report.

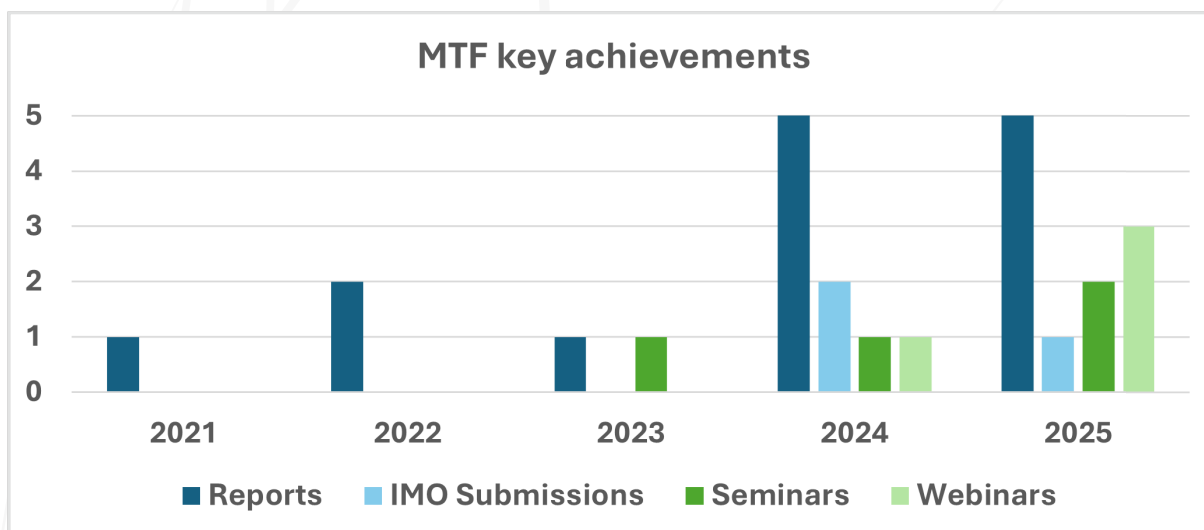
Referencing this report:

Lippuner, Lars and Pierre C Sames (2026): MTF Annual Report, available at <https://www.maritimetechnologiesforum.com>

## Achievements

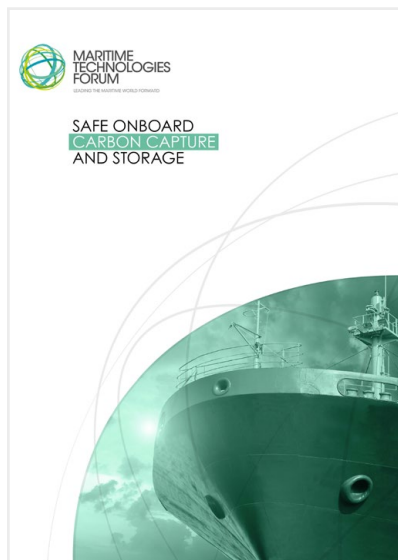
### Overview

To be effective, MTF ramped up communication actions over the last four years, and 2025 can be seen as demonstration of the current commitment to deliver value to our stakeholders. The following diagram shows communications actions over time, and the next sections provide more details.



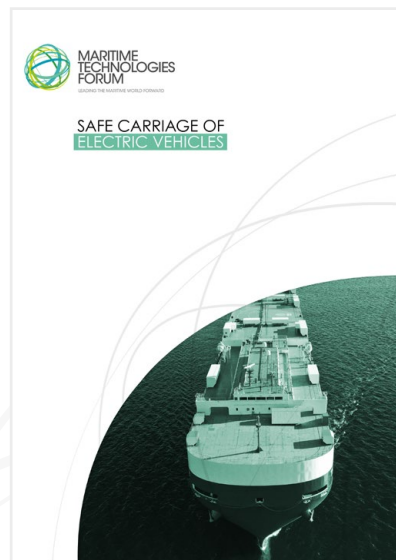
## Reports

In 2025, MTF continued to drive safe maritime decarbonization and delivered five reports which were published on the MTF website and launched with press releases. Please refer to the list of references at the end of this report. The reports focused on operational safety management, qualitative risk assessment as part of the approval process and selected technologies.



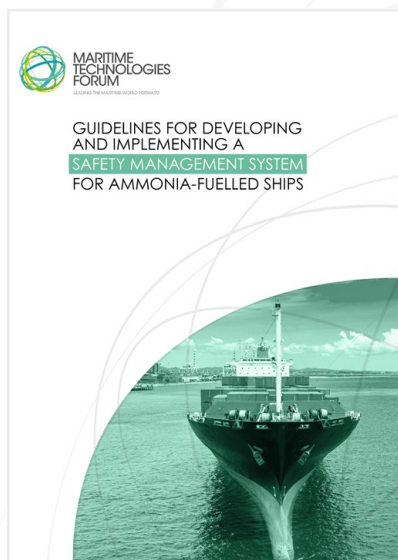
### Safe onboard Carbon Capture and Storage

This report highlighted safety challenges related to onboard carbon capture and storage systems and provided recommendations for addressing these from technology and regulatory perspectives.



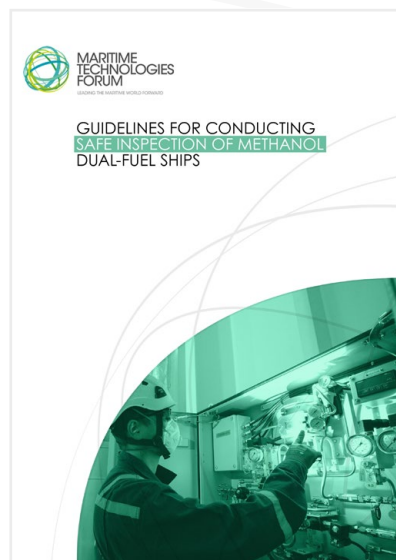
### Safe Carriage of Electric Vehicles

This report addressed potential measures industry could take to enable safe carriage of electric vehicles. The report was submitted to a Correspondence Group working under IMO SSE, developing potential mandatory measures.



### Guidelines to Develop and Implement a Safety management System for Ammonia-fuelled Ships

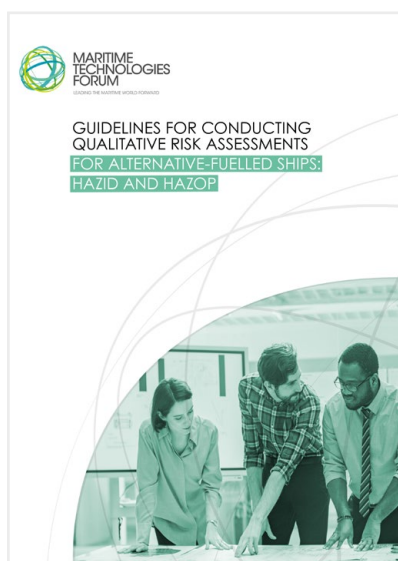
This report addressed implementation of the ISM Code, forward looking for vessels to use ammonia as ship fuel. To strengthen the guidelines, MTF worked with industry stakeholders. The report was submitted to IMO MSC.



### Guidelines for Conducting Safe Inspection of Methanol Dual-fuel Ships

This report addressed the challenges when conducting inspections of ships using methanol as fuel. To strengthen the guidelines, MTF worked with industry stakeholders. The report was introduced at the Tokyo MoU Committee meeting in October 2025.



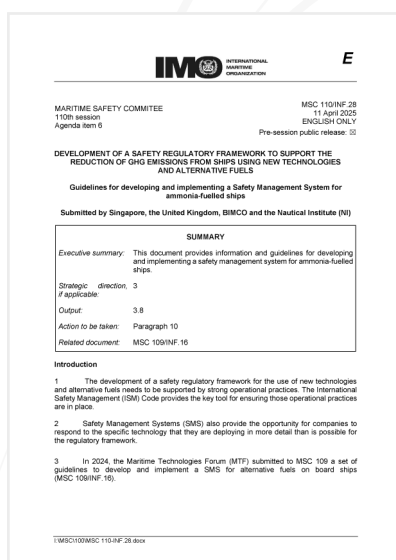


## Guidelines for Conducting Qualitative Risk Assessments for Alternative-fuelled Ships

This report addressed the approval process for alternative fuelled ships and the use of qualitative risk assessment mandated by the IGF Code. The guidelines aim at supporting transparency and consistent outcomes.

## IMO Submissions

In 2025 one MTF report was submitted to IMO as INF-paper, addressing our ambition to “Establish a reputation with the IMO as a Forum that is able to give aligned, rigorous and thought-through advice on technological change and opportunities in order to inform future changes to Conventions.”



## Submitted as MSC 110/INF.28

The submission by two MTF flag State members was co-sponsored by two industry stakeholders (who previously contributed to the report).

(The paper was introduced during a lunchtime presentation at MSC 110.)

## Seminars

MTF conducted its 3<sup>rd</sup> seminar during the Singapore Maritime Week in March 2025, presenting and discussing two MTF reports ("Guidelines to Develop and Implement a Safety management System for Ammonia-fuelled Ships" and "Safe Carriage of Electric Vehicles"). Two panels with industry and MTF representatives were conducted to discuss findings and implications, see below for snapshots.



The 4<sup>th</sup> MTF seminar was conducted during the Europort 2025 exhibition and conference in Rotterdam in November 2025 and MTF presented the report on "Guidelines for Conducting Qualitative Risk Assessments for Alternative-fuelled Ships." Two panels with industry stakeholders and MTF representatives were conducted to discuss findings and implications, see below for impressions.



## Webinars

MTF conducted three webinars in 2025 presenting the reports on "Safe onboard Carbon Capture and Storage," "Guidelines to Develop and Implement a Safety management System for Ammonia-fuelled Ships" and "Safe Carriage of Electric Vehicles". The recordings of the webinars are available on the MTF website.

## Conference presentations

MTF has also started to become invited to conferences presenting specific reports and providing overviews of our work to other stakeholder groups of the maritime industry. One example was the presentation on the importance of safety management when introducing new technologies at the IUMI Annual Conference 2025, see below snapshot.



## Media coverage

Each report is published on the MTF website with an associated press release. Maritime online media channels have reported on the MTF reports frequently. A thought leadership article on "Safe Onboard Carbon Capture and Storage" was published in the Baltic transport Journal 2/2025. An article on MTF incl. an Interview with the WG Chair Dr. Pierre Sames was published in SeaNews in August 2025.

## Online presence

The MTF LinkedIn channel (<https://www.linkedin.com/company/maritime-technologies-forum-mtf>) started in January 2025 and more than 770 followers have connected. The channel informs about new reports and provides invitations to the MTF seminars and webinars.

The MTF website ([www.maritimetechnologiesforum.com](http://www.maritimetechnologiesforum.com)) provides access to the MTF publications and news.

## Outlook 2026

We are working to provide more guidance in 2026 related to safety management to continue accelerating a safe maritime decarbonization. Three new reports will address guidelines for developing and implementing a safety management system for three different decarbonization technologies: wind-assisted propulsion systems, methanol as fuel and battery electric storage systems.

MTF continues to collaborate with industry stakeholders and welcomes their contributions. Please reach out to [contact@maritimetechnologiesforum.com](mailto:contact@maritimetechnologiesforum.com) if your organisation would like to learn more.



## References

Daiyan, Hamid, et al. (2025): Safe Onboard Carbon Capture and Storage, available at <https://www.maritimetechnologiesforum.com/documents/2025-mtf-safe-onboard-carbon-capture-and-storage.pdf>

Diacakis, Minas, et al. (2025): Guidelines for Conducting Qualitative Risk Assessments for Alternative-fuelled Ships, available at [https://www.maritimetechnologiesforum.com/documents/202511\\_MTF\\_Guidelines\\_for\\_conducting\\_qualitative\\_risk\\_assessments.pdf](https://www.maritimetechnologiesforum.com/documents/202511_MTF_Guidelines_for_conducting_qualitative_risk_assessments.pdf)

Machado, Stephen, et al. (2025): Guidelines for Developing and Implementing a Safety Management System for Ammonia-fuelled Ships, available at <https://www.maritimetechnologiesforum.com/documents/mtf-ammonia-specific-ism-guidelines-1.pdf>

Namba, Yoshihiko, et al. (2025) Safe Carriage of Electric Vehicles, available at <https://www.maritimetechnologiesforum.com/documents/2025-mtf-safe-carriage-of-evs-3.pdf>

Yeo, Eddie, et al. (2025): Guidelines for Conducting Safe Inspection of Methanol Dual-fuel Ships, available at [https://www.maritimetechnologiesforum.com/documents/202509\\_MTF\\_SIM-report\\_20250919\\_rev2.pdf](https://www.maritimetechnologiesforum.com/documents/202509_MTF_SIM-report_20250919_rev2.pdf)

Singapore, the United Kingdom, BIMCO and the Nautical Institute (2025): Guidelines for Developing and Implementing a Safety Management System for Ammonia-fuelled Ships, submitted to IMO as MSC110/INF.28

## MTF members

MTF is a group of Flag States and Classification Societies, established in 2021. The Flag State administrations include Maritime Bureau, Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Japan; the Norwegian Maritime Authority (NMA); the Maritime and Coastguard Agency (MCA), United Kingdom; and the Maritime and Port Authority of Singapore (MPA). The Classification Society members are ABS, ClassNK, DNV, LR.

Chair of Executive Committee: Lars Lippuner, Director UK Customer Maritime Services, MCA

Chair of Working Group: Dr. Pierre C Sames, Strategic Development Director, DNV

## Contact

Please contact **[contact@maritimetechnologiesforum.com](mailto:contact@maritimetechnologiesforum.com)** in case of questions or comments.



